PRESSURIZED FLUID CONTROLLER USING TILT / PUSH / PULL OPERATOR

Abstract: An intuitive pressurized fluid controller using tilt / push / pull operator includes a swivel joint "(33)" having a through hole "(14)". A lever "(15)" passes through the hole "(14)" such that it can move axially as well as tiltably. A first array of valves "(18a, 18b, 18c, 18d)" are arranged radially to the lever "(15)" axis so they can be activated either individually or in close pairs as the lever "(15)" is tilted. An actuator "(17)" is attached perpendicularly to and further along the lever "(15)". A second array of valves "(23a, 23b, 23c, 23d)" are arranged circularly to and parallel to the lever "(15)" and close to the actuator "(17)" so they can be activated when the lever "(15)" is pulled in it's axial direction. A third array of valves "(20a, 20b, 20c, 20d)" are arranged circularly to and in opposite parallel alignment to the lever "(15)" and close to the actuator "(17)" so they can be activated when the lever "(15)" is pushed in it's axial direction. Wherein, when plumbed to a plurality of pressurable positioners "(27a, 27b, 27c, 27d)" supporting a heavy equipment "(24)", the first radial array of valves "(18a, 18b, 18c, 18d)" can control the equipment "(24)" pitch and roll as the lever "(15)" is tilted, and the second and third arrays of axial valves "(23a, 23b, 23c, 23d and 20a, 20b, 20c, 20d)" can control the equipment "(24)" elevation as the lever "(15)" is pulled and pushed.